

COAL AGE

With Which Is Consolidated
The "Colliery Engineer" and "Mines and Minerals"

INDEX TO VOLUME 51

January to December, 1946

NOTE—The articles and references in this index have been classified under leading subjects or topics, as far as practicable, and should be sought under such heads, which, together with all unclassified matter, are arranged alphabetically. Illustrated articles, or cuts standing by themselves are indicated by an asterisk (*). The subject matter of editorials will be found classified under the subject with which they deal and marked (e). Many titles of articles are abbreviated, the aim being to give prominence to important words.

A

Accidents

- Blasted Kentucky mine sealed; 20 bodies still inside, Feb. 168
- Cave-in damages start suit, May. 198
- Explosion takes 15, Feb. 162
- Jap mine disaster sets new record, June. 136
- Kentucky mine blast investigation, Mar. 130
- Monthly fatalities, Jan. 162, Feb. 174, Mar. 128, May 198, Aug. 144, Sept. 148, Oct. 166, Dec. 172
- Accounting—Forms for reporting daily data, Mar. *114
- Payroll work speeded by modern machine equipment, J. C. McNeil, Aug. *92
- American Institute of Electrical Engineers—West Virginia Section and New River & Winding Gulf Institute meeting, July. *134

American Institute of Mining & Metallurgical Engineers

- Anthracite section meetings, June *139, Dec. *136
- Central Appalachian Section elects officers, Dec. 140
- Central Appalachian Section meetings, July *130, Dec. *138
- Coal Div. meets with Fuels Div. of A.S.M.E., Dec. *122
- Report of meeting in Chicago, Apr. *136
- American Mining Congress—Report of meeting, June. *118
- American Society of Mechanical Engineers—Fuels Div. meets with Coal Div. of A.I.M.E., Dec. *122

Anthracite

- Bootleg mining action taken by Philadelphia, Mar. 144
- Bootleg miners in Pennsylvania restrained by court injunction, Nov. 154
- Cave-in study by Bureau of Mines, June 134
- Loaders and cleaners register substantial sales gains in 1945, Young & Anderson (tables), Feb. 95
- New anthracite preparation facilities in 1945, Feb. 91
- New tests burn anthracite in oxygen, Nov. 146
- Pennsylvania anthracite region needs flood-control program, June. 116
- Production by months, Jan. 128, Feb. 146, Mar. 122, Apr. 144, May 190, June 124, July 114, Aug. 116, Sept. 118, Oct. 122, Nov. 128, Dec. 120
- Reading briquette use fine anthracite in two new plants, Oct. *76
- Standards specified by OPA, Apr. 147
- Strike ended by agreement, June. 115

Anthracite Institute

- Bituminous, anthracite and coke industries meet, Oct. 128
- Dinner meetings, Dec. 150
- New headquarters, June. *129
- Plans new research, Nov. 128
- Post-war planning committee named, Jan. 130
- Six "Answer Homes" displayed, May. *164
- Anthracite Institute and Anthracite Industries merge activities, Feb. 168
- Appalachian Coals, Inc. Coal Heating Service shown to salesmen May. 194

Atomic Power

- Atomic energy as coal competition outlined in committee report, Oct. 128
- Development program announced by Manhattan District, May. 166

- Is atomic power going to push coal out of the picture? (e), Oct. 65
- Australia—Brief report on coal mining, June. 144

Awards

- C. F. Rand medal to go to G. M. Humphrey, Dec. 148
- "Coal-for-Victory" award winners, May 94
- Holmes Safety awards resumed, May. 174

B

- Belgium—Coal deficit, May. 166
- Coal mines to be modernized, July. 146
- Big Sandy-Elkhorn Coal Mining Institute—Safety awards made, Aug. 124
- Safety teams meet at Pikeville, Nov. *128

Bituminous Coal

- Coal crisis; how it originated, what it means to the nation, what must be done to prevent a recurrence, June. *66
- Consumption by months, Jan. 128, Feb. 146, Mar. 122, Apr. 144, May 190, June 124, July 114, Aug. 116, Sept. 118, Oct. 122, Nov. 128, Dec. 120
- Contract signed with government, June 115
- Crossroads? (e) Sept. 71
- Five-year forecast of bituminous demand by Appalachian Coals (table), Feb. 84
- Foremen's union signs contract with government, Aug. 115
- Government operation continues as foremen become a major issue, July. 113
- Government starts first move to release mines, Sept. 117
- How the public sees the bituminous shutdown, Dec. 71
- Is bituminous coal headed for another round of low prices due to excess capacity? P. W. Graff, Nov. *70
- Krug-Lewis agreement reopened by government, Nov. 125
- Lewis closes bituminous mines; welfare fund stymies negotiations, Apr. *127, (e) Apr. 75
- Lewis ends bituminous stoppage as contempt case goes higher, Dec. 119
- Loaders and cleaners register substantial sales gains in 1945, Young & Anderson (tables), Feb. 95
- New bituminous preparation facilities in 1945, Feb. 92
- Not by default (e) Aug. 65
- Pilot plant planned for smokeless fuel, Nov. 144
- Production at bituminous mines compiled by Bureau of Mines 1943-44 (tables), Young & Anderson, Apr. 105
- Production by months, Jan. 128, Feb. 146, Mar. 122, Apr. 144, May 190, June 124, July 114, Aug. 116, Sept. 118, Oct. 122, Nov. 128, Dec. 120
- Seizure: road to nationalization? Given & Stanbury, Aug. *66
- SFAW regulations changed, Apr. 128
- Stocks by months, Jan. 128, Feb. 146, Mar. 122, Apr. 144, May 190, June 124, July 114, Aug. 116, Sept. 118, Oct. 122, Nov. 128, Dec. 120
- Wage negotiations broken off; U.M.W. bans regional contracts, Oct. *121
- Bituminous Coal Institute—Headquarters moves to Washington, Sept. 124
- Staff is enlarged, Nov. 140

Bituminous Coal Research

- Adds new western tonnage to its roster, Oct. 124

- Budget approved, Apr. 149
- Report of meeting, Aug. 128
- Blasting—All-around stemming subdues flame in creviced coal, Apr. *110, correction, Aug. 100
- Blasting vibration: facts refute property-damage claims, L. D. Leet, Sept. *91
- Bluefield Southern Industrial Exhibition to be resumed, Jan. 130
- Briquetting—Plant starts output, Mar. 144
- Reading Briquet uses fine anthracite in two new plants, Oct. *76

Bureau of Mines

- Cave-in study, June. 134
- Develops low-cost water heater, Oct. 148
- Explosives Chief named, Apr. 160
- Fuel advisory group appointed, May. 166
- Hydrogenation demonstration plant to be established, Jan. 132
- Permissible equipment plates issued, Jan. 156, Feb. 152, Mar. 131, Apr. 146, May 172, June 128, July 144, Aug. 128, Sept. 126, Oct. 126, Nov. 138, Dec. 128
- Production at bituminous mines compiled by Bureau of Mines 1943-44 (tables), Young & Anderson, Apr. 105
- Synthetic-fuel laboratory contract let, Feb. 142
- Synthetic liquid fuel laboratory staff named, Mar. 128

C

Canada

- Coal supply eases, Aug. 142
- Miners seek wage boosts, Sept. 136
- Nova Scotia Society views coal's future, Aug. 146
- Shortage spurs coal mining, July. 147
- Wage boosts for miners, Oct. 148
- Central West Virginia Coal Mining Institute meeting, Apr. 170, June 140, July 150, Dec. 154
- Mine explosions discussed at meeting, Sept. 152
- Report of meeting, Aug. 140
- China—Mines resume operation, Apr. 160

Coal

- Arkansas-Oklahoma Coal Operators Assn. to sponsor study of region, Nov. 142
- Coal charter: industry's next job, I. A. Given, July. *72
- Coal and the coal miner (e) Dec. 67
- Coal and competition in 1945 (table) Feb. 88
- Coal mining plans for the future (tables) Feb. *84
- Highlights in the 1945 coal picture, Feb. 87
- Coal crisis; how it originated, what it means to the nation, what must be done to prevent a recurrence, June. *66
- The job ahead for coal, Dec. 80
- Meeting the future in coal mining, Apr. *76
- Natural gas ... growing coal competitor (chart & map), Sept. 72
- New Jersey coal and coke users' buying habits studied, Mar. 136
- New York City declares coal emergency, Feb. 144
- Oil from coal nearer as development work gathers momentum, Hon. Jennings Randolph, Aug. *86
- Old King Coal festival revived to honor Illinois mining county, Nov. *132
- Overlooking a spring, he missed a dip, June. *100
- Prices raised by OPA order, Jan. 130, Aug. 116

St. Louis area to have new ceiling prices, Feb.	166
How the public sees the bituminous shutdown, Dec.	71
Seizure: road to nationalization? Given & Stanbury, Aug.	*66
U. S. and European mining advances highlight A.I.M.E. program, Apr.	*136

Coal Age

Charter subscriber still active in mining, Apr.	*150
Historical summary, Jan.	142
F. W. Richart retires, Jan.	*146
Stanbury and McNeal join staff, Apr.	*148
Coal Exporters' Association—Organization meeting, Jan.	156
Coal Mines Administration—Government operation continues as foremen become a major issue, July.	*113

Coal Mining Institute of America

Election of officers, Jan.	145
Report of meeting, Jan.	136
Wiring arrangement, Mar.	*112
"Coal-for-Victory"—Award winners, May.	94
How "Coal-for-Victory" management made its records, May.	90

Conveyors

Automatic controls essential for conveyor operation today. C. W. Thompson, Apr.	*86
Chain and belt conveyors expand production at Phoenix. Read & Richart, Apr.	*93
Construction hoist kept for conveyor maintenance, Mar.	*116
High efficiency marks operation at new Sewell No. 1 mine. J. H. Edwards, Feb.	*106
Loaders and cleaners register substantial sales gains in 1945. Young & Anderson (tables) Feb.	95
Machine methods for high productivity, May.	*101
Pivoted chutes improve belt operation, June.	*110
Ramps facilitate scraper-to-conveyor transfer, Apr.	*122
Shaker conveyor operations at Hayden Coal include underground toilets. Harris & Lambur, Jan.	*96
Shaker rocket support improved, Jan.	*112
Supply handling for efficiency in trackless coal mining, June.	*80
Cumberland Valley Coal Mining Institute—Safety meet, Nov.	148
Czechoslovakia—Coal distillation byproducts, July.	146

D**Drainage**

A.I.M.E. Anthracite Section discusses deep-well type pumps, Dec.	*136
Drainage for low-cost mining, May.	*124
Flood control program urged for Pennsylvania anthracite region, June.	116
Drainage and shorting in winter, Dec.	102
Jug and valve make float-control device for sump pump, Oct.	*110
Piney Fork mine put high in efficiency by modern methods. R. R. Richart, Nov.	*76

E**Electricity**

Armatures put in the clear at Reliance, Feb.	*130
Armature soldering with electric equipment, Mar.	*116
Automatic controls essential for conveyor operation today. C. W. Thompson, Apr.	*86
Belt hoists handle coal smoothly and economically, Mar.	*93
Cable protected by ground shield and circuit breaker. Leonard Wilson, Oct.	*81
Can electro-static sparks endanger mines or ignite explosive charges? (table) Oct.	102
Circuit breakers discussed at Pocahontas Institute, Mar.	126
Clamps hold cable for vulcanizing, May.	*160
Communication underground discussed by C.M.I., Jan.	136
D.C. sectionalizing localizes interruptions at Kenilworth, Sept.	*86
Fan failure deenergizes underground power circuits. Pollock & Richart, Jan.	*89
Fused nip box promotes safety, Apr.	*124
Grounding discussed at Central Appalachian A.E.M.E. meeting, Dec.	138
Metal-clad switchgear handles interrupting needs at Coaldale. Connor & Richart, June.	*72
Pilot wire opens breaker before trolley wire falls, Mar.	*112
Power for efficient operation, May.	*118
Silicone resins applied to motors as insulating materials raise operating temperature. R. F. Horrell, Mar.	*76
Strip voltage improved by field-boosting generator. R. G. Gehlsen, June.	*86
Substation fire protection includes door switch, Nov.	*114

Switch stops spillage at transfer station, May.	*156
Trolley wire protected with guard, Apr.	*124
Two-way "radio" offers efficient communication at Pando, Nov.	*98
Winter care of electric equipment, Dec.	102
Europe—Coal picture continues critical, Apr.	140
Coal preparation of interest, Apr.	148
European Coal Organization—Group to be permanent, Feb.	164

Examinations

Bituminous mine, foremen, Pa., July 100, Aug.	104
Coal Age quiz, Jan. 104, Apr. 114, May.	152
Foreman quiz, Alabama, Mar.	104
Foreman quiz, Indiana, June.	102
Foreman quiz, Ohio, Jan. 104, Feb. 124, May 152, Aug. 104, Dec.	104
Foreman quiz, Pennsylvania, Apr. 116, May 154, June 104, Dec.	106
Foreman quiz, West Virginia, Feb. 122, Aug. 102, Sept. 104, Oct. 106, Nov.	110
Exhibit—Southern Appalachian exhibit, Oct.	130
Exports—Coal plans revealed, Jan.	128

F

Face preparation—Face preparation for better loading, May.	*111
---	------

Foremen

Conference method promotes efficiency in mine supervision. Lee Harris, July.	*88
Examinations for bituminous mine foremen, Pa., July 100, Aug.	104
Examination for mine foremen, Alabama, Mar.	104
Examination for mine foremen, Indiana, June.	102
Examination for mine foremen, Ohio, Jan. 104, Feb. 124, May 152, Aug. 104, Dec.	104
Examination for mine foremen, Pennsylvania, Apr. 116, May 154, June 104, Dec.	106
Examination for mine foremen, West Virginia, Feb. 122, Aug. 102, Sept. 104, Oct. 106, Nov.	110
The mine boss: what's on his mind re his job and future. W. H. Kishnick, Sept.	*83
NLRB allows foremen unionization, Apr.	154
Organizing supervisors (e) Apr.	75
France—Coal mines seek U. S. equipment, July.	144
Five-year plan for improving coal mines announced, June.	142

Freight Rates

Railroads ask boosts, May 168, Aug.	116
Rates increased temporarily, July.	114

Fuel

Big Inch and Little Inch pipe lines disposition not settled, Feb.	172
Ceilings raised on industrial oil, Apr.	153
Fuel preference in new homes studied, Nov.	142
Gasification tests prove satisfactory, Dec.	154
Gasification tests studied in Alabama, Nov.	125
Gasoline from coal held now economical, Nov.	134
Hocking Valley coal tests to be expanded, Nov.	140
Home-oil scarcity said to impend, Jan.	121
Oil from coal nearer as development work gathers momentum, Aug.	*86
Oil-heating sales in the future, May.	170
Synthetic-fuel laboratory contract let, Feb.	142
Tug strike cuts off New York fuel, Mar.	126

G

Germany—Explorations locate deposit of anthracite, June.	142
---	-----

Great Britain

American methods to increase output, May.	172
Coal compensation board sets mine payment, Aug.	138
Inadequate machinery retards mines, Apr.	144
Industrial consumption increasing, June.	140
Nationalization Bill, Jan. 121, Feb.	146
Nottingham mine to be modern, Feb.	142
Situation is grave, Mar.	134

I

Illinois Mining Institute—Boat-trip meeting, Aug.	*118
Election of officers, Dec.	134
Report of meeting, Dec.	*132
Illinois Society of Preparation Engineers—Belt haulage studied, Jan.	158
Indiana Coal Trade Association—Modern laboratory handles coal testing work, Feb.	*110

J

Japan—Coal output begins to recover, Mar.	124
Mine disaster sets new record, June.	136

K

Kanawha Coal Operations Assn.—Report of meeting, Nov.	148
Kentucky Mining Institute—Election of officers, Jan.	126
Report of meeting, Jan.	*122

L**Labor**

Anthracite agreement ends strike, June.	115
Anthracite strike set, May.	163
Bathroom design economizes on space, Feb.	*128
Bituminous contract signed by government, June.	115
Bituminous mines closed; welfare fund stymies negotiations, Apr.	*127
Bituminous stoppage responsibility rests with Lewis (e) Apr.	75
Children's camps break records, Koppers Coal, Mar.	124
Coal charter; industry's next job, I. A. Given, July.	*72
Coal crisis; how it originated, what it means to the nation, what must be done to prevent a recurrence, June.	*66
Conference method promotes efficiency in mine supervisions. Lee Harris, July.	*88
Disabled-veteran plan matches men and jobs, July.	154
First move to release mines started by government, Sept.	117
Foremen accused by Wyoming miners, Sept.	126
Foremen unionization allowed by NLRB, Apr.	154
Former union leader held in mine shooting, Aug.	136
Foremen's union signs contract with government, Aug.	115
G.I.'s picket mines in anthracite area, Feb.	140
Government operation continues as foremen become a major issue, July.	113
How the public sees the bituminous shutdown, Dec.	71
Incentives put to work for mining progress, Jan.	*84
The job ahead for coal, Dec.	80
Krug-Lewis agreement reopened by government, Nov.	125
Labor unions (e) Mar.	65
Lewis ends bituminous stoppage as contempt case goes higher, Dec.	119
Lewis rejoins A.F.L. after 10-year rift, Feb.	139
Management provides miners' vacations, Aug.	138
The mine boss: what's on his mind re his job and future. W. H. Kishnick, Sept.	*83
Mine superintendent resigns in protest, July.	150
Music planned for mine workings, Sept.	124
Office workers in two companies sign contracts with government, Aug.	115
Piney Fork mine put high in efficiency by modern methods. R. R. Richart, Nov.	*76
Representative for anthracite operators on welfare fund is named, Aug.	124
Seizure: road to nationalization? Given & Stanbury, Aug.	*66
Storm ahead? (e) Feb.	83
Strike cripples rail and power service, May.	163
Strike settlement assessed as a victory for Lewis (e) June.	65
Subsoil pollutants in mine villages, Sept.	102
Tug strike cuts off New York fuel, Mar.	126
The union and coal, Dec.	68
Union relations—help or hindrance in future mining progress? Mar.	80
United Mine Workers 1919-1946, Dec.	68
Wage negotiations broken off; U.M.W. Dec.	68
bans regional contracts, Oct.	*121
Wage policy talk by union heads, Mar.	119
What the miner thinks of the coal-mining situation (charts) Dec.	*73
Wildcat and sympathy strikes spread, Sept.	124

Law and Legislation

Kentucky passes new mine safety bill, Apr.	154
Nanticoke, Pa. to regulate all mine operation, June.	134
Old Forge (Pa.) Borough Council passes stripping bill, Sept.	122
Pennsylvania stripping law upheld by court, Oct.	146
Magnetic separators solve tramp-iron problem in preparation. E. H. Neyman, Mar.	*90

Maintenance

Air wrench for tire changing, May....	*161
Armatures put in the clear at Reliance, Feb.	*130
Bridge of shop crane moved by roller and steel cable, July.....	*106
Bulldozer rack facilitates pit supply and maintenance, Dec.	*108
Cap lamp cell remover, Feb.....	*126
Cleaning shed at Hudson Coal Co. shop, Sept.	*114
Clips make planing operation easier, Oct.	*114
Construction hoist kept for conveyor maintenance, Mar.	*116
Crane for shop has 20-ft. sweep, June.....	*112
Crane handles portable compressor, Mar.	*108
Cutter bits tipped on back, Dec.....	*114
Cutter and lacer facilitate belt work, Jan.	*112
Diesel electric locomotive turns its own tires, Dec.	*114
Door racks in tool room, Mar.....	*110
Drag buckets improved by renewable press-locked teeth, Dec.....	*112
Electric soldering faster, Mar.....	*116
Eyebolts and pins split with cutting torch, Aug.	*108
Flame cutting, welding for efficient maintenance and low cost, A. D. Stout, Jr., Sept., *94; Oct., 97; Nov.....	160
Foundry crane has rubber tires, Nov.....	*122
Grease gun supplies power for press, Oct.	*110
Greasing unit, Dec.	*110
Impellers moved in special crates, Sept.....	*112
Jack guard minimizes loader damage, Mar.	*108
Keeping tools on loading machines, Jan.	*114
Loader delays reduced by better brake clevis, Feb.	*132
Locomotive axle-cap bolts stay put, Apr.	*118
Lubricant container, June.....	*108
Machine cuts keyway in one pass, Nov.....	*120
Magnetic separator for scrap brass, Feb.	*130
Maintenance for more working time, May	*127
Metallizing salvages and cuts maintenance at Kemmerer, Oct.	*90
Motor-change time cut in half by roof-jack gin pole, June.....	*110
Motor load reduced by lubricating conveyor center, Dec.....	*116
Placing jam nuts, July.....	*108
Portable stands serve shop better, Oct.....	*116
Pump tester improves maintenance of truck diesels, Dec.....	*116
Radial drill modernized with gear-shift drive, Jan.	*116
Rails over shop pit can be removed, Oct.	*118
Service life of cone casting extended, Sept.	*112
Shop-made presses facilitate maintenance, Oct.	*114
Shop truck does own crane work, Feb.....	*132
Special tongs help move sheet steel, Aug.	*113
Splining machine meets shop's need, July	*110
Storage rack protects drills, Jan.....	*118
Swing jack improved by clock in place of nipple, Jan.....	*116
Wooden press and yokes and straighten doors and cars, Feb.....	*136
Worn locomotive tires trimmed without removing truck, Dec.....	*112

Management

Coal charter: industry's next job, I. A. Given, July.....	*72
Conference method promotes efficiency in mine supervision, Lee Harris, July	*88
How the public sees the bituminous shutdown, Dec.	71
Incentives put to work for mining progress, Jan.	*64
The job ahead for coal, Dec.....	80
Management: vital ingredient in efficiency (charts) May.....	90
The mine boss: what's on his mind re his job and future, W. H. Kushnick, Sept.	*83

Mechanization

Consolidation crew loads 1,402 tons in a shift, Nov.....	*126
Conveyors and scrapers raise efficiency in Phoenix, Read & Richart, Apr.....	*93
Cutshin truck-mine output boosted by mechanized mining, Sept.....	*78
Loaders and duckbills meet varying conditions at Blue Pennant, J. H. Edwards, Aug.	*72
Loaders and cleaners register substantial sales gains in 1945, Young & Anderson (tables) Feb.....	95
Loaders have tools welded to machines, Jan.	*114
Loader improved with change in nut, Mar.	*114
Loaders and shuttle cars in standard plan at Blaine mine, Jan.....	*94
Loader stop minimizes damage, Mar.....	*108
Low-cost mining goal at Robin Hood mine, J. H. Edwards, Jan.....	*68
Machine methods for high productivity, May	*101
Prefabricated truck boosts track-loader tonnage at Norco, R. R. Richart, Dec.....	*83

Shaker-conveyor work at Imperial Coal, Oct.	*72
Shortwall carriers, supply trucks and a belt winder boost efficiency at trackless operation, R. R. Richart, July.....	*83
Tennessee Products builds full-mechanical mine, J. H. Edwards, Mar.....	*81
WPB Limitation Order relating to production of coal mining machinery terminated, Feb.	170

Merchandizing

Anthraxite Institute shows six "Answer Homes", May	*164
Coal exhibit draws home builders, Apr.	142
Coal Heating Service plan boosted by sales group, Dec.....	120
Coal Heating Service Plan endorsed by retailers, June	132
Coal Heating Service shown to salesmen, May	194
District heating: real answer to competition, Mar.	*66
Meeting the future in coal mining, Apr. National Association of Home Builders to exhibit at Home Exposition, Feb.....	166
New Jersey coal and coke users' buying habits studied, Mar.....	136
P&R briquet plant starts output, Mar.....	144
Pound or ton? (e) Mar.....	65
Producer-dealer marketing plan approved at National Coal meeting, Apr.....	*130
The retailer: partner in coal prosperity, W. A. Stanbury, Jr., Oct.....	*66
Mine Inspectors' Institute—Election of officers, July	122
Report of convention, July.....	*116
Mining Electrical Group of Southern Illinois—Exhibition of Mining industry, Feb.	162

Mining Methods

All-around stemming subdues flame in creviced coal, Apr.....	*110
Drill held on cutter bar by bracket, May	*156
Drilling and mucking speed Hudson Coal tunnel driving, R. R. Richart, Jan.	*79
Guides to efficiency (e) Aug.....	65
Loaders and duckbills meet varying conditions at Blue Pennant, J. H. Edwards, Aug.	*72
Manholes placed in permanent overcasts, Aug.	*108
One reason why pillars pass air into goafs and returns, June.....	*98
Overlooking a spring, he missed a dip, June	*100
Oversetting of posts regarded in various ways, Mar.	*100
Piney Fork mine put high in efficiency by modern methods, R. R. Richart, Nov.	*76
Planning for efficiency, May.....	*96
Reducing dust at face by soaking coal with water through boreholes, Sept.....	*100
Shaft sinking around large boreholes discussed at Kentucky Institute, Jan. Shaker-conveyor work at Imperial Coal, Oct.	122
Shortwall carriers, supply trucks and a belt winder boost efficiency at trackless operation, R. R. Richart, July.....	*83
Toilets underground supplement modern mining methods at Hayden, Harris & Lambur, Jan.	*96
Mining Society of Nova Scotia—Meeting views coal's future, Aug.....	146
Moshannon Coal Mining Institute—Annual meeting, Nov.	154

N**National Coal Association**

Coal-Heating Service agreement to be signed, Oct.	126
Coal Heating Service plan boosted by sales group, Dec.....	120
Coal Heating Service reports progress, Nov.	132
Coal-Heating Service Division head appointed, Sept.	122
Coal Heating Service Plan endorsed by retailers, June	132
Cooper heads vocational program, Dec.....	150
Cooperation to widen use of bituminous, Feb.	139
Election of officers, Apr.....	134
Report of meeting, Apr.....	*130
National Safety Congress—Report of meeting, Nov.	136

Natural Gas

Big Inch bids reflected by WAA, Dec.....	120
Big Inch and Little Inch pipeline bids studied, Sept.	122
"Big Inch" purchase offer, May.....	174
"Big Inch" sought for natural gas, Apr.	140
F.P.C. hearings for pipeline bids, July.....	140
Deadline set for natural gas investigation, Aug. 126; Nov.....	136
F.P.C. investigation (e) Sept.....	71
Gasoline feasible from natural gas, Nov.	128
More gas lines proposed, Apr.....	158
Natural gas—Growing coal competitor (chart & map) Sept. 72, correction, Nov.	144
Pipeline additions requested, Oct.....	126
Pipeline extensions proposed, June.....	132
Texas-Los Angeles pipeline approved, July	140

New River & Winding Gulf Electrical & Mechanical Institute and W. V. Section of A.I.E.E. meeting, July.....	*134
Norway—Coal shipments to be resumed, July	146

O

Overseas coal notes, Sept. 130, Oct. 150, Nov.	150
---	-----

P**Personals**

Adams, Ben A., Oct.....	158
Arbury, A. F., Dec.....	162
Artz, H. D., May.....	206
Ashley, Dr. George H. retires as Pa. geologist, Sept.	*124
Aycox, M. F., Jan.....	150
Bailey, Ernest L., Feb.....	160
Bailey, Mart V., Dec.....	160
Bannister, W. B., Apr.....	164
Barco, Lewis, Mar. 140, Apr.....	164
Barnes, John P., Jr., May.....	208
Barnard, W. O. Jr., Aug.....	150
Baskin, Wm. E., June.....	148
Bateman, Russell C., Apr.....	166
Bayless, I. N., Feb.....	158
Bearden, Glenn, May 202, Aug.....	152
Beccaloni, Americo, Nov.....	158
Beerbower, W. B., Feb.....	158
Benton, E. D., July.....	152
Berry, W. M., Aug.....	150
Blair, Taylor, July.....	152
Blake, Gerald, Jan.....	150
Blake, R. L., Apr.....	164
Blair, Taylor, July.....	152
Blocher, Frederick W. Jr., Nov.....	160
Blocher, Walter P., Apr.....	162
Bowers, Jesse G., Nov.....	158
Boylan, Joseph S., Nov.....	160
Branham, Andy, Dec.....	158
Brock, R. D., Aug.....	150
Brooks, Frank H., Feb.....	160
Brophy, John P., Oct.....	156
Brown, Albert, Apr.....	162
Brown, O. W., Jan.....	148
Burrill, H. G., Sept.....	140
Byrne, Dr. John F., Sept.....	140
Cain, George C., Apr.....	162
Cammack, Kirk V., Sept.....	140
Campbell, L. C., Feb.....	160
Campbell, "Rusty", May.....	208
Caperton, William G., Jan.....	150
Card, C. A., Dec.....	158
Carothers, Frank C., July.....	154
Carroll, John L., June.....	146
Cassidy, Samuel M., Feb.....	*150
Castanoli, A. F., July.....	152
Castle, Sterling, Dec.....	160
Cavett, J. J., Feb.....	160
Chandoha, Terry, Dec.....	158
Chaplin, George R., Nov.....	158
Chedsey, Dr. William R., Oct.....	156
Childers, Hersnel, Dec.....	158
Clark, Geo. B., Oct.....	156
Clark, George J., May.....	206
Conrad, Chester S., Nov.....	158
Cook, James H., Dec.....	160
Coyle, W. R., Sept.....	142
Cox, Vernon N., Nov.....	158
Crump, L. A., July.....	154
Cummings, Joseph, Aug.....	150
Cunningham, Alan B., Mar.....	140
Cutlin, Norman C., Sept.....	142
Dahlin, Robert, Aug.....	150
Davidson, Parker, Aug.....	150
Davis, Phil, Oct.....	158
Dittrick, A. C., Apr.....	164
Dixon, James, Jan.....	150
Dodson, C. Millard, Sept.....	142
Donaldson, R. F., Apr.....	164
Doolittle, W. L., Apr.....	162
Doyle, Joseph P., May.....	208
Dunbar, Frank B., Apr. 164, May.....	170
Duncan, Damon C., Aug.....	152
Dunlap, Madison A., Dec.....	160
Dunn, John A., Dec.....	158
Eibling, James A., June.....	146
Eleyette, Robert M., May.....	208
Endicott, W. A., May.....	206
Enslow, Frank, Aug.....	150
Estes, Nicholas, Aug.....	150
Estill, R. R., Feb.....	158
Evans, Evan, Dec.....	160
Evans, Minor, Aug.....	150
Evans, M. O., Sept.....	140
Fear, T. G., July.....	154
Ferrell, Michael J., Jr., May.....	208
Fies, Milton H., Mar.....	138
Fischer, Bernard J., Nov.....	160
Fitch, John, July.....	152
Fox, Edward, Apr.....	162
Franklin, C. J., Jan.....	148
Freeman, Dodge, Feb.....	156
Garvey, James R., Dec.....	160
Gillespie, E. M., Feb.....	158
Given, Donald M., Jr., Nov.....	150
Golden, Charles J., Dec.....	158
Gorman, Edmund N., Apr.....	162
Granger, Graham, Feb.....	158
Gray, Richard, July.....	152
Greenwald, Edward J., Feb.....	156
Greisener, Harry, July.....	154
Griesing, H. C., June.....	146
Griffiths, John T., Dec.....	158
Grundy, Barton D., June.....	146
Gurley, Norman B., June.....	146

Guthrie, Cecil, July.....	154
Haake, Donald R., Nov.....	160
Hackney, Robert L., Feb.....	158
Hall, Aaron, Dec.....	160
Hall, W. C., Feb.....	158
Hahman, William F., Jan.....	150
Harvey, A. H., Nov.....	158
Hassan, W. A., Nov.....	158
Houston, E. J., Feb.....	158
Helms, D. C., Aug.....	152
Hendricks, Floyd, Aug.....	152
Hennen, Clyde, June.....	148
Heune, C. Fred, May.....	206
Hicks, H. R., Nov.....	158
Hill, Robert C., Dec.....	160
Hontz, Harold, June.....	148
Hopper, Hollis, Oct.....	156
Hornke, Glen R., May.....	208
Hornaby, Walter, Aug.....	150
Hout, Frank C., Sept.....	140
Howley, John G., Nov.....	158
Hubbard, Frank, Aug.....	152
Hughes, J. B., Feb.....	158
Humphrey, George M., Feb. 160, Dec.....	160
Hutchison, Joseph, July.....	152
Hutchison, Noah L., Aug.....	150
Jenkins, Wm. J., Mar.....	140
Johnson, Allen J., Dec.....	162
Johnson, Damer, July.....	152
Johnson, Walter J., Dec.....	158
Johnston, Don, July.....	154
Jones, Benjamin, Jan.....	152
Jones, Donald, May.....	208
Jones, George W., Jr., July.....	152
Jones, J. B. T., Dec.....	158
Jones, Lewis C., Dec.....	158
Jones, R. A., Nov.....	160
Kearny, Walter R., Jr., Dec.....	160
Kenton, Richard, July.....	152
Kegan, Seth H., July.....	154
Kemp, Dan F., May.....	208
Kirchner, Ralph, Dec.....	158
Kistler, Wm. C., June.....	146
Klink, Charles, Apr.....	164
Knight, Delmo, Apr.....	162
Kottcamp, Charles F., June.....	146
Kuhn, Ernest, July.....	152
Kurtz, Charles W., Apr.....	152
Lambur, C. H., Apr.....	152
Lamm, A. E., Nov.....	158
Latimer, T. H., May.....	208
Lauber, F. C., Feb.....	158
Leahy, George J., Apr.....	162
Lebeda, John, Apr.....	166
Lee, Arthur F., May.....	202
Lee, Reuben, June 148, July.....	152
Littlepage, Jay, Feb. 156, Oct.....	156
Livingston, H. C., Feb.....	156
Llewellyn, Robert Lee, Feb. 156, Apr. 162, Oct.....	156
Lockhart, Walter, Jan.....	148
Long, Roy S., Aug.....	152
Lovelace, H. G., Dec.....	160
Love, Henry W., Apr.....	162
Mackey, Virgil, Apr.....	162
MacLean, Dr. John G., Dec.....	162
Major, William S., May.....	206
Martin, William W., Dec.....	158
Mathews, A. R., Oct.....	156
Mayor, Elmer S., May.....	202
Mazza, James A., Aug.....	150
McAuliffe, Eugene, Feb.....	158
McCan, George W., Feb.....	160
McCabe, Dr. Louis C., May.....	202
McCabe, Thomas B., Feb.....	160
McCarthy, T. F., Feb.....	154
McCurdy, Wayne A., Aug.....	150
McDonnott, M. P., Apr.....	162
McDonough, Russell M., Apr.....	164
McGuire, T. W., July.....	152
McIntire, F. L., Feb.....	158
McKee, Robert, Dec.....	150
Mercer, Carl, Dec.....	158
Merritt, G. W., July.....	154
Meyer, F. J., May.....	206
Meyers, W. L., Jan.....	148
Miller, Karl T., Jan. 152, Dec.....	158
Miller, Robert P., May.....	206
Mitchell, John, Feb.....	158
Monks, Edgar, Feb.....	156
Montag, Harold, Apr.....	144
Moore, H. W., Aug.....	152
Moore, W. H., Nov.....	158
Morgan, Raymond J., Dec.....	158
Moser, M. M., Nov.....	160
Mosgrove, Ted, Dec.....	160
Mulvey, Paul A., Sept.....	150
Mullins, Ervin, Nov.....	158
Mullins, Everett, Apr.....	164
Muncie, William, Jan.....	152
Murphy, Thomas, Jan.....	150
Murray, V. O., Feb.....	156
Myer, W. J., May.....	206
Nailler, Charles R., Nov. 158, Dec.....	162
Neal, P. H., July.....	154
Nicholson, John, Jr., June.....	148
Palin, John S., June.....	146
Parker, Joseph E., June.....	148
Patterson, R. D., May.....	208
Paulick, P. R., Apr.....	164
Perry, H. M., July.....	152
Phillips, Samuel M., Aug.....	150
Pierce, James H., Mar.....	138
Pippen, Clyde A., Feb.....	156
Plumlee, Arthur W., Apr.....	150
Potter, Dr. Charles J., Feb. 160, June.....	152
Powell, E. T., Nov.....	158
Price, A. B., Aug.....	150
Protheroe, Richard A., Nov.....	158
Purdy, James B., June.....	146
Pursglove, Joseph, June.....	148
Pyle, Raymond, Oct.....	156
Reilly, James D., Nov.....	160
Richards, Norman, Aug.....	152
Roane, James, June.....	146

Riley, Earl A., July.....	154
Roberts, A. L., Jan.....	152
Roberts, Frank, Dec.....	160
Robertson, Owen, Oct.....	156
Roos, G. A., Apr.....	162
Robert, C. D., Aug.....	152
Ruetelehuber, W. A., June.....	146
Sabo, Charles, Nov.....	158
Sandlin, J. Monroe, Jan.....	148
Sandlin, Dr. Robert W., Sept.....	140
Schell, E. G., Aug.....	150
Schwartz, John P., Dec.....	162
Schweinbraten, Gustave A., Aug.....	150
Schweinbraten, Howard, Sept.....	140
Seallard, Michael, Feb.....	158
Shirley, Warren, Jan.....	152
Shoemaker, G. A., Mar.....	138
Shoffner, John R., Dec.....	162
Shorthouse, L. G., May.....	208
Shupe, Donald B., Dec.....	160
Sniff, Lee D., Dec.....	162
Sisler, D. L., July.....	152
Slater, Edward, Mar.....	140
Smith, Don, May.....	208
Smith, Mike, Apr.....	162
Smith, Ralph, Jan.....	152
Snyder, George H., May.....	206
Southern, Thomas, Apr.....	166
Spencer, Earl, July.....	152
Spindler, G. R., Feb.....	156
Stapleton, Wm., May.....	206
Steele, Burl G., May.....	208
Steele, John T., Aug.....	150
Stern, F. E., Aug.....	152
Stevenson, Charles, Apr.....	164
Stewart, James W., Sept.....	140
Stewart, Joseph W., June.....	146
Stockett, B. Helm, Aug.....	134
Stonebraker, W. L., Dec.....	158
Stow, Dr. Marcellus H., Jan.....	152
Straight, Sanford G., May.....	208
Strong, C. N., May.....	202
Swibart, Harry L., Sept.....	142
Taggart, R. E., Apr.....	162
Taylor, Charles, June.....	146
Tects, R. T., Aug.....	150
Tharp, Glen, Oct.....	156
Thele, Birger G., Sept.....	140
Thomas, L. Newton, June.....	148
Thompson, William E., Dec.....	158
Thorne, Marvin Y., Aug.....	150
Tierman, John W., June.....	146
Todd, L. H., Sept.....	140
Todhunter, Richard T., Sept.....	146
Tokarek, A. C., Apr.....	166
Tomko, Bill, June.....	146
Tully, J. M., May.....	206
Turner, Harry, Aug.....	150
Utz, Conrad, Jr., Dec.....	160
Van Horn, Ralph L., Dec.....	158
Van Kleeck, Augustus R., July.....	152
Von Storch, Robert, Jan.....	152
Vossler, A. W., Feb.....	156
Walker, Carl, May.....	206
Walker, Charles E., Oct. 156, Nov.....	158
Wallace, Alfred, Oct.....	156
Wallace, Oscar, Jan.....	148
Watson, J. O., July.....	154
Webb, Arlie, Dec.....	158
Werner, Dave, July.....	152
West, T. J., Aug.....	152
Westerberg, Carl S., May.....	206
Weysser, John L. G., June.....	148
Whalen, J. D., July.....	152
White, Jerome C., Sept.....	140
Wickey, Harold B., Apr.....	162
Wiegand, A. J., Dec.....	158
Wilkinson, Cecil, July.....	154
Williams, Elmer, Jan.....	150
Winger, L. H., Apr. 161, May.....	208
Witt, James L., June.....	148
Woodhead, Sam, Feb.....	158
Workman, L. E., Aug.....	150
Yonah, C. C., Jan.....	150
Young, Elmer F., May.....	206
Zabriskey, Joseph, Sep. May.....	208
Zimmerman, Maj. Raymond E., Jan.....	152
Zuspan, Edgar L., Nov.....	158
Peachontas Electrical & Mechanical Institute—Bluefield, W. Va. meeting, Mar.....	126

Preparation

Better preparation sells more coal (e) Jan.....	63
Dustproofing builds markets by satisfying coal users. H. H. Morris (charts) Jan.....	*81
Freezeproofing: what it accomplishes and how to do it. W. A. Staab, Nov.....	95
Gate in hydro separator not needed, Jan. jig-box improvements used at Enos Coal, Jan.....	*108
Kentucky institute discusses washability investigations, Jan.....	122
Magnetic separators solve tramp-iron problem in preparation. E. H. Neyman, Mar.....	*90
Modern washeries culminate Tennessee Coal, Iron & R. R. preparation solution. Springer & McRoy (flow sheets) Apr.....	*99
New preparation facilities, Jan. 154 Feb. 162, July 156, Aug. 156, Sept. 142 Oct. 162, Nov. 162, Dec.....	166
Piney Fork mine put high in efficiency by modern methods. R. R. Richart Nov.....	*76
Preparation for consumer satisfaction, May.....	*144
Semi-portable plant prepares coal from two strip operations, Aug.....	*82
Sand drying modernized at Hudson's Lorve Colliery, Nov.....	*92
Surface moisture reduction, June.....	124

Water for preparation discussed by C.M.I., Jan.....	136
---	-----

R

Railroads—Dieselization on Chicago, Indianapolis & Louisville RR, Jan.....	130
Reading Briquet Co. Fine Anthracite used in two new plants, Oct.....	*76
Refuse disposal—see Waste disposal	
Regulation—Indiana county commission regulates coal mining, July.....	144
Research	
Arkansas-Oklahoma Coal Operators Assn. to sponsor study of region, Nov.....	142
Carbonization process ready for test, June.....	152
Indiana coal testing work handled by modern laboratory, Feb.....	*110
Koppers extends technical service, Mar. Oil from coal nearer as development work gathers momentum. Hon. Jennings Randolph, Aug.....	*86
Small-scale research at the coal mine, Aug.....	100
Synthetic-fuel laboratory contract, Feb. 142; Mar.....	128
University of Illinois to study home design, Sept.....	126
Wyoming—Natural Resources Research Institute expands coal study, Dec.....	156
Rocky Mountain Coal Mining Institute—Election of officers, July.....	128
Report of meeting, July.....	*124
correction, Sept.....	124

Roof Control

Central Appalachian A.I.M.E. meeting discusses timbering and grounding, Dec.....	128
How to post a pitching bed—should props be underset or overset? Feb.....	*118
Hunting for loose rocks: how to make roof safe despite them, July.....	*96
One reason why pillars pass air into goafs and returns, June.....	*98
Oversetting of posts regarded in various ways, Mar.....	*100
Safe support provided by hitching and steel timbers. J. V. McKenna, July.....	*78
Systematic timbering at working face, July.....	98
Timber-setting truck saves labor, reduces accidents, May.....	*158
Using one's head to detect loose rock, Dec.....	100

Russia

Block systems being installed, July.....	147
Dombas to be the largest coal producer in Europe, Mar.....	*120
Karaganda fields developed, Feb.....	*144
Mine machinery copies American types, Aug.....	136
Plans for extensions in mines, June.....	142
Underground gasification resumed, Apr.....	128

S

Safety

Accident-free "Master Miner", Nov.....	*134
Aluminum guard the lungs against silicosis and tuberculosis? Dec.....	*100
Barometer aids when explosion occurs, Dec.....	102
Big Sandy-Elkhorn Coal Mining Institute makes safety awards, Aug.....	124
Cable protected by ground shield and circuit breaker, Leonard Wilson, Oct.....	*81
Can electro-static sparks endanger mines or ignite explosive charges (table) Oct.....	102
Coal's safety record—best in history of the industry in 1945. F. T. Moyer Feb.....	93
Cumberland Valley Coal Mining Inst. safety meet, Nov.....	148
Dampening coal dust, June.....	100
Door design assures improved service, Dec.....	*110
Dust abatement by sprinkling and spraying in coal mines, June.....	*90
Eastern Ohio safety meet, Dec.....	154
Fire protection includes door switch, Nov.....	*114
Fire extinguisher board shows use, July.....	*108
Fires in mines discussed by C.M.I., Jan.....	136
Fused nip box promotes safety, Apr.....	*124
Hinged drag for use behind trips, June.....	100
Hitching and steel timbers provide safe support. J. V. McKenna, July.....	*78
Holmes Safety awards resumed, May.....	174
Hunting for loose rocks: how to make roof safe despite them, July.....	*96
Illinois mines have best safety year, Mar.....	124
Inspection standards to be revised, Apr.....	160
Kentucky passes new mine-safety bill, Apr.....	154
Kentucky state safety meet, Dec.....	156
Krug-Lewis safety code, Aug.....	115
Lock rim kept in place during tire inflation, Mar.....	*112
Locomotive wheel guards prevent foot injuries, June.....	*112

Manholes placed in permanent over-casts, Aug.....	*108	Ohio group studies strip operations, Jan.....	128	Tree growth checked, Sept.....	136
Methane in air and explosion limit, Sept.....	102	Ohio strip operators seek hands-off policy, Feb.....	144	Truck mines	
Mine Inspector's Institute holds convention, July.....	*116	Ohio studies strip-mine tax plan, Mar.....	122	Air wrench for tire changing, May.....	*161
Narcolepsy as cause of accident, Dec.....	102	Pennsylvania stripping law upheld by court, Oct.....	146	Lock rim kept in place during tire inflation, Mar.....	*112
National Safety Competition safety awards made, Aug.....	116	Planned stripping at Pyramid, Apr.....	*81	Machine methods for high productivity, May.....	*101
National Safety Council plans drive, Mar.....	128	Reclaiming stripmined land discussed at Indiana Association, Jan.....	146	Mechanized mining boosts Cutschin truck-mine output, Sept.....	*78
Pennsylvania to have three safety offices, Jan.....	160	Reclaimed strippings given to Legion Post, Nov.....	134	New underground truck mine in Indiana, Mar.....	119
Pilot wire opens breaker before trolley wire falls, Mar.....	*112	Reclaimed strippings provide pulpwood, Dec.....	152	Turbines, gas	
Pioneer Miners' Reunion—accident-free old timers, Oct.....	*130	Rotary drill mounted on cat, Mar.....	*110	Gas-turbine locomotive development reported, Aug.....	116
Reducing dust at face by soaking coal with water through boreholes, Sept.....	*100	Semi-portable plant prepares coal from two strip operations, Aug.....	*82	Kaiser steel mill to test operation of gas turbine, Dec.....	148
Rock dust for winter, Dec.....	102	Spoil reclamation assures good income without leveling, July.....	*91	Gas-turbine locomotive: new motive power for big coal customer, W. A. Stanbury Jr., Oct.....	*82
Rock dust—how much rock dust will assure immunity from coal-dust explosions, May.....	*148	Strip voltage improved by field-boasting generator, R. G. Gehlsen, June.....	*86		
Safety code topic at Illinois Institute meeting, Dec.....	132	Stripping efficiency raised by new methods and equipment, Mar.....	*71	U	
Safety dogs protect man-cars on slopes, J. V. Mather, Aug.....	*116	25-yd. dragline for stripping at Maumee, Feb.....	*101	United Mine Workers	
Safety for better coal mining, May.....	*132	Correction, Apr.....	*138	Lewis ends bituminous stoppage as attempt case goes higher, Dec.....	119
Slid reduces injuries in car handling, May.....	*160	Washington State plans coal stripping, Jan.....	148	United Mine Workers 1919-1946, Dec.....	68
Special doors suggested for fire-fighting, Sept.....	110	Wyoming Valley, Pa. strip pits refilled by operators, May.....	192	Wage negotiations broken off; regional contracts banned, Oct.....	*121
Special tongs help move sheet steel, Aug.....	*113	Supplies		Wage policy talk, Mar.....	119
Subsoil pollutants in mine villages, Sept.....	102	Storage space made above trusses, Nov.....	*116	United Mine Workers see also Labor	
Taper action clamps stop to hoist rope, Oct.....	*118	Supply handling for efficiency in trackless coal mining, June.....	*80	U. S. Chamber of Commerce	
Taste of gases, Dec.....	102	Supply service for efficient handling, May.....	*130	National Resources Department members named, Oct.....	124
Toilets underground supplement modern mining methods at Hayden Harris & Lumbur, Jan.....	*96	Surveys and surveying—Center point improves transit for low-coal work, Feb.....	*128	University of Illinois Conference, Aug.....	146
Track-dump valve passes rock but stops man, Apr.....	*118	How plane profiles can be misread, May.....	*150	Utilization	
Using one's head to detect loose rock, Dec.....	100	Sweden—Import stoppage of coal from U. S. causes crisis, June.....	142	Carbonization process ready for test, June.....	152
When an accident occurs, always do something about it, Feb.....	120	T		District heating; real answer to competition, Mar.....	*66
Wire guard protects timberman, Apr.....	*124	Taxation—Kentucky may have coal severance tax, Jan.....	148	House subcommittee to study coal uses, July.....	114
Scrap movement should be aided by all industries, Sept.....	122	Ohio studies strip-mine tax plan, Mar.....	122	National Coal Assn. plans to widen use of bituminous, Feb.....	139
Smoke Abatement		Transportation		University of Illinois to study home design, Sept.....	126
Akron, Ohio, joins anti-smoke campaign, Feb.....	151	B.C.R. locomotive plans move forward, Sept.....	122	V	
Anti-smoke studies proceed, Mar.....	126	Belt haulage featured by West Virginia Institute, Dec.....	128	Ventilation	
Cincinnati coal men draft their own anti-smoke plan, Nov.....	154	Belt hoists handle coal smoothly and economically, Mar.....	*93	Adjustment of steel regulator doors retained by locks, Aug.....	*112
Coal Producers' Comm. for Smoke Abatement meets in Cincinnati, Sept.....	128	Better track through turnouts as transition elements, N. B. Gurley, Jan.....	*75	Altimeter ventilation surveys discussed at Kentucky Institute, Jan.....	122
Columbus, Ohio, passes smoke ordinance, June.....	152	Car retarder operates from third rail, Aug.....	*113	Cooling makes warm air sweet; gasified water is lighter than air, Nov.....	*106
Common sense sought in smoke abatement, Nov.....	154	Chute permits continuous loading, Sept.....	*110	Exhaust vs. pressure fans; advantages and drawbacks of each, Aug.....	*98
Ohio cities talk against smoke, Oct.....	142	Deisel electric locomotive turns its own tires, Dec.....	*114	Fan failure deenergizes underground power circuits, Pollock & Richart, Jan.....	*89
Ohio Coal Association joins smoke battle, Jan.....	134	Doors and cars straightened by wooden press and yokes, Feb.....	*136	Little water vapor in cold air, July.....	*98
Pilot plant planned for smokeless fuel, Nov.....	144	Electric locomotives discussed at Illinois Institute meeting, Dec.....	*132	Proper auxiliary equipment improves mine ventilation, J. H. Dickerson, Dec.....	*96
Solid Fuels Administration		Endgate lifter works automatically, Sept.....	*108	State of Pennsylvania legal ventilation requirements, Dec.....	106
Leke defines activities, Mar.....	142	Gas-turbine locomotive development reported, July 113; Aug.....	116	Ventilation for more tons per man, May.....	*121
New order controls shipments, July.....	114	Gas-turbine locomotive: new motive power for big coal customer, W. A. Stanbury Jr., Oct.....	*82	Why intakes and returns rarely carry same volume of air, Jan.....	*100
Potter awarded Medal for Merit, June.....	*132	Headers support hangers in top coal, Nov.....	*116	W	
To remain in existence throughout the year, May.....	198	High bridge promotes economical haulage, Apr.....	*120	Waste Disposal	
South Africa—Coal resources to be investigated, July.....	147	Hinged drag for better safety, June.....	*108	A.I.M.E. discuss refuse disposal, June.....	*130
Southern Appalachian Industrial Exhibit, Oct.....	130	Hoist with drum indicator, Dec.....	*108	Efficient refuse disposal, May.....	146
Stoker Manufacturers' Association—Report of meeting, July.....	128	Level-deck cross-track hoisting car saves labor, June.....	*106	Pennsylvania anthracite mines aid in stream clean-up, Oct.....	126
Stoves and stokers		Locomotive axle-cap bolts stay put, Apr.....	*118	Pusher helps in slate disposal, Apr.....	*124
Anthracite Institute shows six "Answer Homes" May.....	*164	Locomotive wheel guards prevent foot injuries, June.....	*112	Recovering sludge discussed by C.M.I., Jan.....	136
Chrysler to build coal-fired furnace, Sept.....	132	Machine methods for high productivity, May.....	*101	Track-dump valve passes rock but stops man, Apr.....	*118
Sales by months, Jan. 128, Feb. 146, Mar. 122, Apr. 144, May 130, June 124, July 114, Aug. 116, Sept. 118, Oct. 122, Nov. 128, Dec.....	120	Main line ties made with thin bases and long bolts, Sept.....	*108	Water heater developed by Mines Bureau, Oct.....	148
Stripping and dredging		Pattern makes 40 journal brusses, July.....	*106	Water treatment supplied by Princess-Elkhorn plant, June.....	*88
Bussey strip mine solves its problems by unusual methods, Dec.....	*92	Prefabricated track boosts track-loader tonnage at Narco, R. R. Richart, Dec.....	*83	Welding	
Drag buckets improved with renewable cross-toothed teeth, Dec.....	*112	Safety dogs protect man-cars on slopes, J. V. Mather, Aug.....	*110	Awards announced for industrial designs, Aug.....	140
Efficient stripping with modern equipment and methods, May.....	*137	Shuttle-cars and loaders in standard plan at Blaine mine, Jan.....	*94	Rims help turn welding work, Feb.....	*134
Georgetown stripping coordinates operations for efficiency, R. R. Richart, Oct.....	*88	Signal shows cars off the track, Oct.....	*118	Welding, flame cutting for efficient maintenance and low cost, A. D. Stout, Jr., pt. 1, Sept. *94, pt. 2, Oct. *97, pt. 3, Nov.....	*100
Illinois strip law declared unconstitutional, Dec.....	146	Switch thrown automatically, Oct.....	*116	West Virginia Coal Mining Institute—Election of officers, Dec.....	*130
Indiana county plans control of stripping, June.....	138	Switchthrower actuated by locomotive, Oct.....	*118	Report of meeting, July 139, Dec.....	*128
Loaders and cleaners register substantial sales gains in 1945, Young & Anderson, (tables), Feb.....	95	Thawing pits speed dumping of frozen cars at Hauto, R. R. Richart, Feb.....	*98	Western Coal Heating Institute—Formed at Spokane, Jan.....	158
Ohio Association plants trees, Aug.....	138	Track cleaner also plows snow, Jan.....	*118	Western Kentucky Mining Institute—Election of officers, Jan.....	*128
Ohio Commission delays strip report, Sept.....	134	Transportation for low-cost operation, May.....	*115		
Ohio governor hits stripping state land, Ohio.....	146	Two-way "radio" offers efficient communication at Pando, Nov.....	*98		
		Underground haulage, June.....	128		
		Unloading of railroad cars speeded by electric shaker, Dec.....	90		

MINE AND COMPANY INDEX

- A**
- Alpine Fuel Co.
Baldwin mine closed, May..... 164
Kubler mine to reopen, Nov..... 126
Amherst Coal Co.
Level-deck cross-track hoisting car
saves labor, June.....*106
Pusher helps in slate disposal, Apr.....*124
Ayrshire Collieries Corp.
Chicago & Harrisburg Coal Co. prop-
erties acquired, May..... 164
Delta mine purchased, Sept..... 118
Strip mining contracts let Feb..... 140
- B**
- Bell & Zoller Coal & Mining Co.
Completes 60 years in industry, Mar.... 134
First coal from new mine, Nov..... 126
Big Bend Collieries Co.
Birch Creek Coal Co. purchased, May.. 164
Big Bend Coal Mining Co.
Rochester & Pittsburgh Coal Co. ac-
quires holdings, Mar..... 120
Binkley Mining Co.
Safe support provided by hitching and
steel timbers, J. V. McKenna, July.. *78
Blue Diamond Coal Co.
High bridge promotes economical haul-
age, Apr.....*120
Leatherwood completes temporary tip-
ple, June.....*134
Leatherwood mine being developed into
Kentucky's largest, Feb.....*113
Bradford Coal Co.
Semi-portable plant prepares coal from
two strip operations, Aug.....*82
- C**
- Carbon Fuel Co.
Electric shaker speeds unloading of
railroad cars, Dec.....*90
Carbon Valley Coal Co.
Long Coal Co. takes over mine, Sept.. 118
Carpentertown Coal & Coke Co.
Expansion of operation, Dec..... 120
Central Indiana Coal Co.
New strip mine, Apr..... 144
Chapman Bros. Coal Co.
Opening a strip mine, Sept..... 118
Christian Colliery Co.
Worn locomotive tires trimmed without
removing truck, Dec.....*112
Citizens' Mining & Sales Co.
Mine "B" reopened, Jan..... 134
Consolidation Coal Co.
Crew loads 1,402 tons in a shift, Nov..*126
Sales of realty holdings, May..... 164
Crab Orchard Improvement Co.
Loup Creek Collieries Co. purchases
stock, Mar..... 120
Crozer Coal & Coke Co.
Wyoming Mining Corp. purchased, Apr. 144
Culmerville Coal Co.
Tippie damaged by fire, Apr..... 158
Cutsin Coal Co.
Main line ties made with thin bases
and long bolts, Sept.....*108
Mechanized mining boosts truck-mine
output, Sept.....*78
- D**
- Delta Coal Mining Co.
Shop jib crane has 20-ft. sweep, June..*112
Donbas, Russia
Planned as the largest coal producer
in Europe, Mar.....*120
Dover Mines Div.
Vote for U.M.W., Mar..... 128
Dunreath Coal Co.
Bulldozer rack facilitates pit supply
and maintenance, Dec.....*108
Bussey strip mine solves its problems
by unusual methods, Dec.....*92
Renewable press-locked teeth improve
drag buckets, Dec.....*112
- E**
- Eastern Gas & Fuel Associates
Eccles mines taken over, Mar..... 120
Technical service extended, Mar..... 133
Eccles mines
Taken over by Eastern Gas & Fuel As-
sociates, Mar..... 120
Edison Anthracite Coal Co.
G.I.'s picket mines, Feb..... 140
Nesquehoning Colliery to be closed in
fall, Aug..... 124
Elk Horn Coal Corp.
Strikes end after six weeks, Oct..... 124
Termination of receivership sought,
Mar..... 120
Eros Coal Mining Co.
Ten jig-box improvements, Jan.....*108
- F**
- Frick Coke Co.
Opens world's largest mine, Oct..... 122
- G**
- G. I. Mountain Coal Co.
Center point improves transit for low-
cost coal work, Feb.....*128
G. I. Alden Coal Co.
Plans to refill strippings, June..... 134
- H**
- Hanna Coal Co.
Aids sea scouts with training ship, Oct. 124
Bracket holds drill on cutter bar, Mar..*156
Fire extinguisher board shows use, July..*108
Fused nip box promotes safety, Apr.....*124
Georgetown stripping coordinates opera-
tions for efficiency, R. R. Richart,
Oct.....*88
Properties transferred to Pittsburgh
Consolidation Coal Co., July..... 140
Research service organized, Jan..... 156
Wire guard protects timberman, Apr.....*124
Harman Coal Co.
Refusal to dismiss two foremen leads
to strike, Sept..... 124
Hart-Strake Coal Co.
Car retarder operates from third rail,
Aug.....*113
Chute permits continuous loading, Sept..*110
Machine cuts keyway in one pass, Oct..*120
Shortwall carriers, supply trucks and a
belt winder boost efficiency at track-
less operation, R. R. Richart, July..*83
Splining machine meets shop's need,
July.....*110
Hasto Coal Co.
Thawing pits speed dumping of frozen
cars, R. R. Richart, Feb.....*98
Hayden Coal Co.
Modern facilities include underground
toilets, Harris & Lambur, Jan.....*96
High Splint Coal Co.
Track cleaner also plows snow, Jan....*118
Wooden press and yokes straighten
doors and cars, Feb.....*136
Highwood Western Railway Co.
To develop coal field, May..... 164
Hudson Coal Co.
Cleaning shed added at Providence,
Sept.....*114
Employees awarded certificates, June.. 138
Country crane has rubber tires, Nov.....*122
Honors two officials, Apr..... 142
Impellers moved in special crates, Sept. 112
Machine mucking speeds coal tunnel-
driving work, H. H. Richart, Jan....*79
Mine official rewarded for safety, Jan.. 132
Portable stands serve shop better, Oct..*116
Safety Group holds annual banquet,
Dec..... 152
Sand conditioner a help to foundry,
July.....*104
Sand drying modernized at Loree Col-
liery, Nov.....*92
Special tongs help move sheet steel,
Aug.....*113
Strip pits refilled, May..... 192
Hutchinson Coal & Coke Co.
New mine in Logan County, Feb..... 139
- I**
- Imperial Coal Co.
Headers support hangers in top coal,
Nov.....*116
High efficiency marks shaker-conveyor
work, Oct.....*72
Switchthrower actuated by locomotive,
Oct.....*118
Independent Coal & Coke Co.
Cable protected by ground shield and
circuit breaker, Leonard Wilson, Oct..*81
D.C. sectionalizing localizes interrup-
tions at Kenilworth, Sept.....*86
Door design assures improved service,
Dec.....*110
Fire protection includes door switch,
Nov.....*114
Storage space made above trusses, Nov..*116
Industrial Collieries Corp.
Contract signed for office worker, Aug.. 115
Island Creek Coal Co.
Miners' homes sold, Sept..... 122
New mine to be opened, Jan..... 134
Shipment of first coal, Sept..... 118
- J**
- Jefferson Coal Co.
Modern methods put Piney Fork in high
efficiency class, R. R. Richart, Nov..*76
Jug and valve make float-control de-
vice, Oct.....*110
Piney Fork mine shop gets new greas-
ing unit, Dec.....*110
Rails over shop pit can be removed,
Nov.....*118
Jones & Laughlin Steel Corp.
Foremen's union signs contract with
government, Aug..... 115
- K**
- Kehley Run Colliery
Shenandoah, Pa. sue for cave-in dam-
ages, May..... 198
- L**
- Kemmerer Coal Co.
Grease gun supplies power for press,
Oct.....*110
Metallizing salvages material and cuts
maintenance, Oct.....*90
Taper action clamps stop to hoist rope,
Nov.....*119
Kentucky Straight Creek Coal Co.
Blasted mine sealed; 20 bodies still
inside, Feb..... 168
Kenwood Coal Co.
Strip-coal land purchased, Apr..... 144
Knox Consolidated Coal Corp.
Templeton trophy won again, Jan..... 134
Koppers Coal Div.
Baxter, W. Va. mining community to
be sold, Oct..... 128
Bridge of shop crane moved by roller
and steel cable, July.....*106
Children's camps break records, Mar.. 124
- L**
- Lamar Colliery Co.
New mine to be opened, Nov..... 126
Lehigh Navigation Coal Co.
Cutter and lacer facilitate belt work,
Jan.....*112
Door racks utilize wall space in tool
room, Mar.....*116
Electric soldering faster, Mar.....*116
Gear-shift drive modernizes radial drill,
Jan.....*116
Magnetic separator for scrap brass,
Feb.....*130
Metal-clad switchgear handles inter-
rupting needs at Coaldale, Connor &
Richart, June.....*72
Shop truck does own crane work, Feb..*132
Storage rack protects drills, Jan.....*118
Lehigh Valley Coal Co.
Clips make planing operation easier,
Oct.....*114
Eyebolts and pins split with cutting
torch, Aug.....*108
Mine negligence not proved, Jan..... 134
Pattern makes 40 journal brasses, July..*106
Safety dogs protect man-cars on slopes,
J. V. Mather, Aug.....*110
Service life of cone casting extended,
Sept.....*112
Locust Coal Co.
High operating costs shut down colliery,
July..... 150
Logan County Coal Corp.
Level-deck cross-track hoisting car
saves labor, June.....*106
Lone Star Steel Co.
Coking-coal mines for sale, Nov..... 128
Long Coal Co.
Carbon Valley Coal Co. mine taken over,
Sept..... 118
Lorain Coal & Dock Co.
Standard plan evolved for loader and
shuttle-car work, Jan.....*94
Loup Creek Collieries Co.
Crab Orchard Improvement Co. pur-
chased, Mar..... 120
- M**
- Marion County Coal Corp.
Glenridge mine resumed operations, Feb. 140
Maumee Collieries Co.
Reclaimed strippings given to Legion
Post, Nov..... 134
25-cu. yd. dragline heads modern units,
Feb., *101, correction, Apr.....*138
Miller Creek Coal Cooperative
Production starts, Nov..... 126
Minto Coal Co.
Miramichi Lumber Co. purchases min-
ing equipment, Sept..... 118
Morris Coal Mining Co.
Fan failure deenergizes underground
power circuits, Pollock & Richart,
Jan.....*89
Montana Coal & Iron Co.
Dust allayed with oil and water mix-
ture, Jan..... 114
Mt. Olive & Staunton Coal Co.
Mine sold, Feb..... 140
- N**
- New River Co.
Miners' homes sold, Aug..... 124
New River & Pocahontas Consolidated
Coal Co.
Explosion takes 15, Feb..... 162
Northern Coal Corp.
Erection of coal-washing plant planned,
Sept..... 118
Northern Illinois Coal Co.
Portable Compressor handled by crane
Mar.....*108
Norton Coal Co.
Prefabricated track boosts track-loader
tonnage, R. R. Richart, Dec.....*83
- P**
- Pando Coal Co.
Two-way radio offers efficient com-
munication, Nov.....*88
Pardee & Curtin Lumber Co.
Automatic controls essential for con-
veyor operation today, C. W. Thomp-
son, Apr.....*86
Peabody Coal Co.
New mine, Apr..... 144

Pennsylvania Coal Co.	
Music planned for mine workings, Sept.	124
Philadelphia & Reading Coal & Iron Co.	
Appeal to miners for more anthracite, May	190
Briquet plant starts output, Mar.	144
Contributes to Pottsville hospital, Jan.	134
Rims help turn welding work, Feb.	*134
Stripping project planned, Mar.	142
Tells miners ABC's of production, Sept.	124
Phoenix Coal Co.	
Conveyors, scrapers raise efficiency in Mammoth mining. Read & Richart, Apr.	*93
Ramps facilitate scraper-to-conveyor transfer, Apr.	*122
Wheel guards prevent foot injuries, June	*112
Pikeville Fuel Co.	
Purchase of plant for coal preparation, Sept.	118
Pittsburgh Coal Co.	
Block in place of nipple improves swing jack, Jan.	*116
Cap lamp cell remover, Feb.	*126
Jack guard for loader, Mar.	*108
Keeping wrenches and tools on loaders solved, Jan.	*114
Ladder delays reduced by better brake clevis, Feb.	*132
Motor-change time cut in half by roof-jack gin pole, June.	*110
Nut change betters life of forward and reverse, Mar.	*114
Short car skid saves fingers, May.	*160
Pittsburgh Consolidation Coal Co.	
Cassville and Osage mines purchased, Dec.	120
Hanna Coal Co. properties transferred, July	140
Hanna Company big stockholder in company, Jan.	126
Pond River Collieries	
Mine superintendent resigns in protest, July	150
Princess Dorothy Coal Co.	
Low-cost mining over many years goal at Robin Hood mine. J. H. Edwards, Jan.	*68
Princess Elkhorn Coal Co.	
Good town water supplied by new plant, June	*88
Purglove Coal Mining Co.	
Coal Age awards presented to mines, Feb.	*142
Pyne-Taylor Coal Co.	
Safety dogs protect man-cars on slopes. J. V. Mather, Aug.	*110
Pyramid Coal Corp.	
Dismissal of wildcat strikers, Sept.	124
Planned stripping, Apr.	*81

R

Ravens Coals, Inc.	
Opening a mine, Mar.	120
Reading Briquet Co.	
Fine anthracite used in two new plants, Oct.	*76
Red Jacket Coal Corp.	
Sales manual explains coal and its uses, Feb.	151
Replier Coal Co.	
Fire razes breaker, Apr.	151
Rex Carbon Coal Co.	
Cutter bits tipped on back, Dec.	*114
Richwood-Sewell Coal Co.	
High efficiency marks operation at new No. 1 mine. J. H. Edwards, Feb.	*106
Rochester & Pittsburgh Coal Co.	
Big Bend Coal Mining Co. holdings acquired, Mar.	120

S

Sahara Coal Co.	
Axle-cap bolts stay put, Apr.	*118
St. Louis, Rocky Mountain & Pacific Co.	
Endgate lifter works automatically, Sept.	*108
Sand Run	
Fire does not spread, Oct.	124
Sentry Coal Mining Co.	
Air wrench speeds tire changing, May.	*161
Sheffield Steel Co.	
Coking-coal mines for sale, Nov.	128
Sheridan Wyoming Coal Co.	
Shop-made presses facilitate maintenance, Oct.	*114
Switch thrown automatically, Oct.	*116
Sinclair Coal Co.	
Shipments from Old Mac Coal Co. mine, Sept.	118
Sloss-Sheffield Steel & Iron Co.	
Reopening of Kimberly No. 4 mine, Sept.	118
Springfield Coal Corp.	
Developing No. 4 mine, Feb.	140
Stewart Coal Co.	
Strip mine begins operation, Sept.	118
Stonaga Coke & Coal Co.	
Wins "Coal-for-Victory" awards, Apr.	*142
Straight Creek Coal Co.	
Investigation of mine blast, Mar.	130
Susquehanna Collieries Co.	
Union favors increased production, Apr.	153

T

Taylor English Mining Co.	
New strip mine, Feb.	140
Tennessee Coal, Iron & R. R. Co.	
Modern washeries culminate preparation evolution. Springer & McRoy, Apr.	*99

New mine shaft, Feb.	139
Tennessee-Pennsylvania Coal Co.	
New strip mine, Apr.	144
Tennessee Products Corp.	
Bathhouse design economizes on space, Feb.	*128
Construction hoist kept for conveyor maintenance, Mar.	*116
Forms for reporting daily data, Mar.	*114
Reels Cove mine built for long life and low mining costs. J. H. Edwards, Mar.	*81
Spiked sawhorse and short bucksaw save time, Feb.	*134
Track-dump valve passes rock but stops man, Apr.	*118
Three Coal Co.	
New Indiana underground truck mine, Mar.	119
Truax-Traer Coal Co.	
Buys strip land, June.	116
Diesel electric locomotive turns its own tires, Dec.	*114
Motor load reduced by lubricating conveyor center, Dec.	*116
Pump tester improves maintenance of truck design, Dec.	*116
Purchase of coal land, Apr.	144

U

Union Pacific Coal Co.	
Armatures put in the clear at Reliance, Feb.	*130
Shaker rocker support improved, Jan.	*112
United Electric Coal Co.	
Cuba mine to have new coal washer, Sept.	118

W

Wallick Coal Co.	
Management provides miners vacation, Aug.	138
West Kentucky Coal Co.	
Pivoted chutes improve belt operation, June	110
Switch stops spillage at transfer station, May	*156
West Virginia Coal & Coke Corp.	
Deer on the roof of the tippie, July.	*140
Wheeling Township Coal Mining Co.	
Safety awards to employees, May.	192
Winding Gulf Collieries	
New mine started, May.	164
Riffe Branch mine ready to ship coal, Jan.	130
Wyoming Mining Corp.	
Crozer Coal & Coke Co. acquires mine, Apr.	144

AUTHOR'S INDEX

- ANDERSON, R. L. & W. H. Young.** Loaders and cleaners show substantial sales gains in 1945, Feb... 95
Tons per man raised by use of machines at bituminous mines, Apr... 105
- CONNOR, W. E. & R. R. Richart.** Metal-clad switchgear handles interrupting needs at Coaldale, June... *72
- DICKERSON, J. H.** Mine ventilation improved by proper auxiliary equipment, Dec... *96
- EDWARDS, J. H.** High efficiency marks operation at new Sewell No. 1 mine, Feb... *106
Loaders and duckbills meet varying conditions at Blue Pennant, Aug... *72
Low-cost mining over many years goal at Robin Hood mine, Jan... *68
Reels Cove mine built for long life and low mining cost, Mar... *81
- GEHLSSEN, R. G.** Strip voltage improved by field-boosting generator, June... *86
- Given, Ivan A.** Coal charter: industry's next job, July... *72
- Given, Ivan A. & W. A. Stanbury, Jr.** Seizure: road to nationalization? Aug... *66
- Graff, Paul W.** Bituminous coal... a price problem, Nov... *70
- Gurley, Norman B.** Better track through turnouts as transition elements, Jan... *75
- HARRIS, G. R. & C. H. Lambur.** Modern facilities include underground toilets at Hayden, Jan... *96
- Harris, Lee.** Conference method promotes efficiency in mine supervision, July... *88
- Horrell, R. F.** Silicone resins raise insulation operating temperatures, Mar... *76
- KUSHNICK, William H.** The mine boss: what's on his mind re his job and future, Sept... *83
- LAMBUR, Charles H. & G. R. Harris.** Modern facilities include underground toilets at Hayden, Jan... *96
- Leet, L. Don.** Blasting vibration: facts refute property-damage claims, Sept... *91
- MATHER, Joseph V.** Safety dogs protect man-cars on slopes, Aug... *110
- McKenna, J. V.** Safe support provided by hitching and steel timbers, July... *78
- McNeill, Jno. C.** Payroll work speeded by modern machine equipment, Aug... *92
- McRoy, Wallace J. & W. S. Springer.** Modern washeries culminate T.C.I. preparation evolution, Apr... *99
- Morris, H. H.** Dustproofing builds markets by satisfying coal users, Jan... *84
- Meyer, Forrest T.** Coal's safety record is best in history of the industry in 1945, Feb... 93
- NEYMAN, E. H.** Magnetic separators solve tramp-iron problem in preparation, Mar... *90
- POLLOCK, J. G. & R. R. Richart.** Fan failure deenergizes underground power circuits, Jan... *89
- RANDOLPH, Hon. Jennings.** Oil from coal nearer as development work gathers momentum, Aug... *86
- Read, Elkins & R. R. Richart.** Conveyors and scrapers raise efficiency in Mammoth mining, Apr... *93
- Richart, Ralph R.** Georgetown stripping coordinates operations for efficiency, Oct... *88
- Machine mucking—speeds Hudson Coal tunnel-driving work, Jan... *79**
- Modern methods put Piney Fork in high efficiency class, Nov... *76**
- Prefabricated track boosts track-loader tonnage at Norco, Dec... *83**
- Special equipment boosts efficiency at trackless operation, July... *83**
- Thawing pits speed dumping of frozen cars at Hauto, Feb... 98**
- Richart, R. R. & W. E. Connor.** Metal-clad switchgear handles interrupting needs at Coaldale, June... *72
- Richart, R. R. & Elkins Read.** Conveyors and scrapers raise efficiency in Mammoth mining, Apr... *93
- Richart, R. R. & J. G. Pollock.** Fan failure deenergizes underground power circuits, Jan... *89
- SPRINGER, W. S. & W. J. McRoy.** Modern washeries culminate T.C.I. preparation evolution, Apr... *99
- Staab, Wm. A.** Freezeproofing: what it accomplishes and how to do it, Nov... 95
- Stanbury, W. A., Jr.** Gas-turbine locomotive: new motive power for bit coal customer, Oct... *82
- The retailer: partner in coal prosperity, Oct... *66**
- Stanbury, W. A., Jr. & I. A. Given.** Seizure: road to nationalization? Aug... *66
- Stout, A. D., Jr.** Welding flame cutting for efficient maintenance and low cost, pt. 1, Sept. *93, pt. 2, Oct. *97, pt. 3, Nov... *100
- THOMPSON, C. W.** Automatic controls essential for conveyor operation today, Apr... *86
- WILSON, Leonard.** Cable protected by ground shield and circuit breaker, Oct... *81
- YOUNG, W. H. & R. L. Anderson.** Loaders and cleaners show substantial sales gains in 1945, Feb... 95
Tons per man raised by use of machines at bituminous mines, Apr... 105



PUBLIC LIBRARY
In war or peace
B.F. Goodrich
FIRST IN RUBBER
2 1946

It used to burn up every 23 days

A typical example of B. F. Goodrich improvement in rubber

YOU could smell the rubber burning, two blocks away. To make cement, limestone is heated red hot, then sprayed with water as it's dumped onto a moving belt to be carried to the crushing rolls. To keep cost down, there can be no waiting for the stone to cool and the belt must carry 14,000 barrels of it every day. But that sizzling limestone burned out belts of almost every known make . . . they averaged only 23 days.

Belts using steel cables instead of cotton fabric were tried; expensive special rubber covers were used. They weren't much better.

B. F. Goodrich engineers had developed a new principle of belting called the cord belt, in which fabric is replaced by individual cords, each imbedded in rubber. It had lasted as much as 10 times longer than other belts where shock load occurs—the rubber-protected cords absorb the shock where fabric tears.

B. F. Goodrich men reasoned this rubber insulation would protect against heat, too. They combined the cord belt principle with a regular B. F. Goodrich synthetic rubber—especially compounded to stand the heat. Here was the most severe test

possible for the B. F. Goodrich cord principle.

The B. F. Goodrich belt was installed and the red-hot limestone poured out onto it. The belt lasted 150 days—more than 6 times longer! Less cost for replacement, lower maintenance, greater and more uniform production—typical results in thousands of plants from the constant improvement B. F. Goodrich research makes in all rubber products. *The B. F. Goodrich Company, Industrial Products Division, Akron, Ohio.*

B. F. Goodrich

RUBBER and SYNTHETIC products

First in its Field . . .



THE FIRST ELEVATED RAILROAD

It was opened for traffic in 1867 in New York City, the first half mile test section running along Greenwich Street from Battery Place to Dey Street. Speed was 12 to 15 miles an hour. Reorganized in 1870, service was extended to the New York Central Railroad Passenger Station at 29th Street and 9th Avenue, and placed in operation with steam power.

Many a coal man "up in the air" regarding coal mine lubrication has had his troubles ended by down-in-the-mine Hulburt Lubrication Engineering Service and the use of Hulburt Quality Grease. Because . . . for over a quarter century, Hulburt has had a "one track" mind, i.e. to make one product — QUALITY GREASE — and to make it supremely well.

HULBURT OIL & GREASE COMPANY . . PHILADELPHIA, PENNA.

Specialists in Coal Mine Lubrication

*... a record of
American Leadership*



HULBURT

THE
"FIRST NAME"
IN

Quality
GREASE

HAZASHEATH SPIRALWEAVE

... underground cable with
TRIPLE PROTECTION

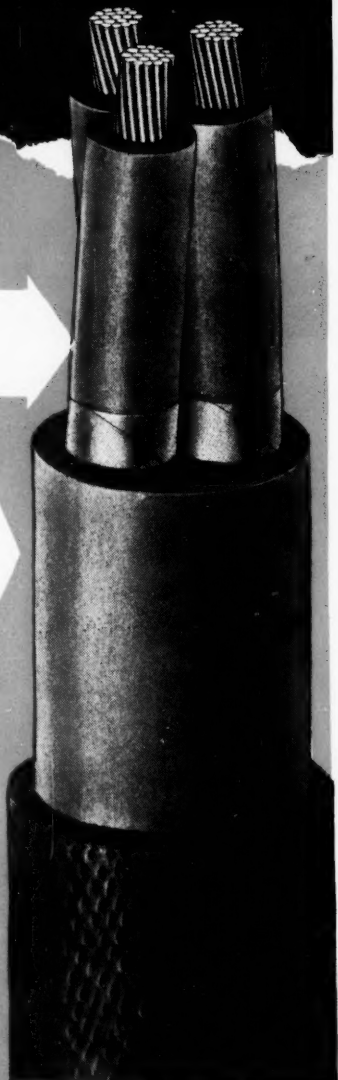
Hazasheath Spiralweave cable is protected against moisture encountered in conduit, direct burial in the ground, and in hanging inside the mine. Mechanical protection is also afforded by these three construction features.

- 1.** Hazard Submarine rubber insulation of high rubber and low sulphur content, developed particularly for non-leaded underground cables; strong, resilient, moisture-resisting insulation.
- 2.** A tough, thick, long lived, mold-cured rubber jacket of dense Hazasheath, similar to a solid truck tire in strength and wear-resistance. It resists chemicals, heat and rough handling as well as moisture. It is proof against the effects of soil acids and alkalies and is extremely tough. Cushions the insulated conductors against falling rock or other injury.
- 3.** Loom-woven Spiralweave covering, treated for fungus-resistance, and thoroughly waterproofed, forms a strong outer protective covering of Fire-hose type. Neither lead sheath nor wire armor is required making Hazasheath lighter in weight, easier to handle, and moderate in cost.

Ask a Hazard sales engineer to tell you how Hazasheath Spiralweave Cables will render you more efficient operation. Hazard Insulated Wire Works, Division of The Okonite Company, Wilkes-Barre, Pa.

HAZARD

insulated wires and cables for every mining use



4394